

AMENDMENTS TO THE CLAIMS

Without prejudice, please amend claim 8 and add new claims 10-18, so that the claims read as follows.

1. (Original) A cathode (11; 20; 30) for cold cathode lamps with integrated getter and with a reduced work function value, the cathode comprising a metallic bearing part (12; 21, 22; 32) at least partially coated with a layer of getter material (15; 26; 31), wherein the getter material is selected from:

alloys comprising zirconium, cobalt and at least one component selected from yttrium, lanthanum and rare earths such that, in a ternary diagram of weight % compositions, the alloys are enclosed in a polygon defined by the following points:

- a) Zr 81% - Co 9% - A 10%
- b) Zr 68% - Co 22% - A 10%
- c) Zr 74% - Co 24% - A 2%
- d) Zr 88% - Co 10% - A 2%

wherein A is an element selected from yttrium, lanthanum, rare earths, and mixtures thereof;

alloys consisting of yttrium and aluminum containing at least 70% by weight yttrium; and

alloys consisting of yttrium and vanadium containing at least 70% by weight yttrium.

2. (Original) The cathode according to claim 1, wherein the metallic bearing part comprises a metal selected from nickel, molybdenum, tungsten, niobium and tantalum.

3. (Original) The cathode according to claim 2, wherein the metallic bearing part has a shape selected from a strip, a full cylinder and a hollow cylinder.

4. (Original) A method for manufacturing a cathode according to claim 1, wherein the getter material layer is formed by cathodic deposition.

5. (Original) The method according to claim 4, wherein the getter material layer has a thickness of less than 20 μm .

6. (Original) The method according to claim 4, wherein the metallic bearing part (21, 22; 32) has a shape of a hollow cylinder, and wherein during the cathodic deposition the part is at least partially coated on one or both internal and external surfaces of the cylinder by masking with a suitably shaped support element.

7. (Original) The method for manufacturing a cathode according to claim 1, wherein the getter material layer is formed by electrophoretic deposition.

8. (Currently Amended) The method according to claim 7, wherein the metallic bearing part (21, 22; 32) has a shape of a hollow cylinder, and wherein during the electrophoretic deposition the part is at least ~~the~~ partially coated on one or both internal and external surfaces of the cylinder by partial immersion in a liquid suspension containing getter particles used for the deposition.

9. (Original) The method according to claim 8, further including the step of masking one of the surfaces to achieve the partial coating.

10. (New) The cathode according to claim 1, wherein the getter material comprises 81% to 88% of Zr.

11. (New) The cathode according to claim 1, wherein the getter material comprises 68% to 74% of Zr.

12. (New) The cathode according to claim 1, wherein the getter material comprises 9% to 10% of Co.

13. (New) The cathode according to claim 1, wherein the getter material comprises 22% to 24% of Co.

14. (New) The cathode according to claim 1, wherein the getter material comprises 2% or 10% of A.

15. (New) The cathode according to claim 1, wherein the getter material is an yttrium and aluminum alloy containing at least 70% by weight of yttrium.

16. (New) The cathode according to claim 1, wherein the getter material is an yttrium and vanadium alloy containing at least 70% by weight of yttrium.

17. (New) The cathode according to claim 1, wherein the metallic bearing part has a shape of a hollow cylinder with a closed end and comprises a molybdenum wire fastened to the closed end.

18. (New) The cathode according to claim 1, wherein the metallic bearing part comprises nickel and has a shape of a hollow cylinder with a closed end and includes a molybdenum wire fastened to the closed end.